

**GOVERNMENT ENGINEERING COLLEGE ,DAHOD (018)**

**COMPUTER ENGINEERING DEPARTMENT (07)**

**LESSION PLANNING**

SUBJECT NAME: COMPUTER NETWORKS (2140709)

FACULTY NAME: VAISHALI NAYAK

<b><u>SR. NO</u></b>	<b><u>CHAPTER</u></b>	<b><u>HOURS</u></b>
<b>1</b>	Introduction to computer networks and Internet: Understanding of network and Internet, The network edge, The network core, Understanding of Delay, Loss and Throughput in the packet-switching network, protocols layers and their service model, History of the computer network .	10
<b>2</b>	Application Layer: Principles of computer applications, Web and HTTP, E-mail, DNS, Socket programming with TCP and UDP.	10
<b>3</b>	Transport Layer: Introduction and transport layer services, Multiplexing and Demultiplexing, Connection less transport (UDP), Principles of reliable data transfer, Connection oriented transport (TCP), Congestion control.	12
<b>4</b>	Network Layer: Introduction, Virtual and Datagram networks, study of router, IP protocol and addressing in the Internet, Routing algorithms, Broadcast and Multicast routing .	12
<b>5</b>	The Link layer and Local area networks: Introduction and link layer services, error-detection and correction techniques, Multiple access protocols, addressing, Ethernet, switches.	08
		<b>52 HOURS</b>

**Reference Books:**

- 1.Computer Networking- A Top-Down approach, 5<sup>th</sup> edition, Kurose and Ross, Pearson
2. Computer Networks (4<sup>th</sup> edition), Andrew Tanenbaum, Prentice Hall
3. Computer Networking and the Internet (5<sup>th</sup> edition),Fred Halsall, Addison Wesley
4. Data Communications and Networking (4<sup>th</sup> edition), Behrouz Forouzan, McGraw Hill
5. TCP/IP Protocol Suite (3<sup>rd</sup> edition), Behrouz Forouzan, McGraw Hill